

ON SOME KANGAROOS AND BANDICOOTS FROM BARROW ISLAND, N.W. AUSTRALIA, AND THE ADJOINING MAINLAND.*

By OLDFIELD THOMAS.

IN connection with the determination of some Kangaroos from North-Western Australia sent home some time ago by Mr. B. H. Woodward of the Perth Museum, a question arose as to the characters of the Kangaroos described by Gould as *Macropus isabellinus* † on an imperfect skin from Barrow Island, off the north-western coast of Australia. That skin, preserved in the British Museum, ‡ had remained unique up to the present time, and therefore Mr. Woodward, with great enterprise, got up, last year, an expedition to Barrow Island in order to obtain topotypes of this little-known animal. His collector, Mr. Tunney, was successful in obtaining a number of specimens, besides examples of *Lagorchestes conspicillatus*, Gould, and of the Bandicoot described below; and a series of these species has been generously given to the National Museum by the authorities of the Perth Museum.

Instead of being, as I had supposed § from the original and very imperfect skin, a relative of *Macropus rufus*, the Barrow Island Kangaroo proves to be another member of the *M. robustus* group, like the form which I described from the Murchison District of Western Australia in last year's Proceedings.

The head is without any of the characteristic markings of *M. rufus*, and the skull shows all the structural characters of *M. robustus*, but is much smaller, as might have been expected from the insular habitat of the animal. It is also noticeably stouter and more heavily built. The hind feet are remarkably short, measuring only 250 mm. in an old male. The tips of the ears behind are brown or blackish, those of all the related continental forms being reddish or sandy like the rest of the head.

Further details on this subject are to be found in a paper which Mr. Waite has recently written || on a specimen in the Sydney Museum, collected by Mr. Tunney at the same time, and also received from the Perth Museum.

The more accurate knowledge now, therefore, available about *M. isabellinus* enables me to give an opinion about some other N.W. Australian Kangaroos received previously from Mr. Woodward.

These are, firstly, a set of four, two males and two females, from Yalgoo,

* The Tring Museum having received the first specimens of *Macropus robustus woodwardi* and other examples of Mr. B. H. Woodward's collections which form part of the material on which these notes and descriptions are based, Mr. Thomas kindly consented to publish them in "Novitates Zoologicae."—WALTER ROTHSCHILD.

† P.Z.S. 1841. p. 81.

‡ No. 41. 10. 12. 5.

§ Cat. Mars. B. M., p. 25, 1888. None of the red members of the *M. robustus* group were then known.

|| Records of Australian Museum, IV. p. 131. pls. xviii. xix. (skull), 1901.

Murchison District, Western Australia. The females are the specimens on which my *Macropus robustus cervinus* was founded, the males, owing to an error in labelling, having been thought to be *M. rufus*, of which specimens were sent home at the same time. For these males the name *cervinus* is unfortunately not very suitable, as they are of a deep rich rufous, similar to, but richer than the ground colour of *M. isabellinus*. The head is of the same colour as the back, not markedly greyer, as it is in the female; but the muzzle is inconspicuously browner. The hairs of the ears are rufous, like those of the crown. In all, males and females, the fur of the nape and fore-back slopes evenly backwards, there being no trace of a dividing whorl in the regions of the withers. This is also the case in *M. isabellinus*. The skull of the male, like that of the female, closely agrees with that of the true *M. robustus*.

A second set of four, two males and two females, obtained, like the previous ones, through the kind agency of Mr. Woodward, are from the Grant Range, in the Kimberley District, North-West Australia. These specimens, which could not be distinguished from *M. isabellinus* until proper material of the latter form was available, I now think to represent another very distinct subspecies of the *robustus* group, and I have ventured to name it in honour of Mr. Woodward, to whose assistance the Museum owes the whole of the material referred to in the present paper.

Macropus robustus woodwardi sp. nov.

Fur shorter, thinner, and harsher than in *cervinus*. Fur of nape and fore-back more or less reversed forwards from a dividing whorl situated on the withers.

Male.—Bright rufous, nearly matching that of *M. isabellinus* above throughout, the head, ears, and back being all of this colour, as are also the middle line of the tail proximally, and the outer side of the limbs. Digits indistinctly blackish. Remainder of limbs and tail, and underside of body dull whitish.

Female in general colour more or less fawn. Otherwise similar to male. One of the two specimens is of a pale sandy fawn, the other a deep fawn like the female of *cervinus*; the former appears to be in summer, and the latter in autumn or winter pelage.

Skull similar in general characters to that of *robustus*, *erubescens*, and *cervinus*, but a little smaller than any of them.

Dimensions (approximate) of the male, taken from the dried skin:—

Head and body, 1250 mm.; tail, 800; hind-foot (s.n.); ear, 90.

Skulls (all "aged"):—

	<i>M. robustus woodwardi</i> .		<i>M. r. cervinus</i> .	<i>M. isabellinus</i> .
	♂	♀	♂	♂
Basal length	158 mm.	124 mm.	170 mm.	144 mm.
Greatest breadth	97 "	73 "	92 "	90 "
Nasals, length	75 "	59 "	81 "	64 "
" greatest breadth	28.5 "	20 "	29 "	23 "
Constriction	19 "	15.5 "	12 "	13 "
Palate, length	107 "	87 "	113 "	95 "
Palatal foramina	11 "	7 "	9.5 "	12 "
Diastema	43 "	29 "	44 "	37 "

Hab. Grant Range, S.W. part of Kimberley District, North-Western Australia.

Type. Old male. B.M. No. 0.6.1.1. Collected by J. T. Tunney.

The whole of these red forms of the *Macropus robustus* group were unknown when the catalogue of Marsupials was published, so that the imperfect type skin of *M. isabellinus* was not unnaturally considered to be related to *M. rufus*, but there is now no doubt that it is a stunted insular form of the same group. To Mr. Woodward alone is due the credit of this very considerable increase in our knowledge of the Western Macropodidæ; the verification of the occurrence of *M. rufus* in Western Australia, the discovery of both *M. robustus cervinus* and *woodwardi*, and the more accurate knowledge of *M. isabellinus*, are all due to Mr. Woodward.

Still farther north-eastwards from the range of the present animal, in the Northern Territory of South Australia, occurs *M. antilopinus* (Gould), which is of a somewhat similar colour and general appearance, but differs markedly by the peculiar inflation of the sides of the muzzle. The hair of its nape slopes uniformly backwards.

Perameles barrowensis sp. nov.

A small insular representative of the continental *P. obesula*.

Size markedly smaller than in *P. obesula*. General colour, strongly lined black and buffy, the individual hairs grey, basally darkening to black, which latter may be either continued to the tip or replaced by buffy; woolly underfur grey basally, whiter terminally. Head like back, or slightly darker; upper lip whitish; no darker markings round eyes. Ears short, rounded, closely covered with fine, buffy hairs. Undersurface dull whitish, not sharply defined, the hairs whitish to their roots. Arms externally like body, darkening to brown on the metacarpals; the digits white. Hind-limbs similar, but the digits also brown. Tail of medium length, grizzled brown above, whitish below.

Skull, although conspicuously smaller, agreeing in all details with that of *P. obesula*, and differing from that of *P. macrura* by all the characters used in the Catalogue to distinguish the two forms. The palatal vacuities are perhaps even more developed than in *P. obesula*, and the zygomatic and angular processes of the mandible are a little more slender in proportion.

The teeth also agree in general characters with those of *P. obesula*, but the molars are rather less hypsodont and retain their cusps longer, those of the oldest specimen not being yet worn flat. The last upper molar has its posterior accessory cusp quite minute.

Dimensions of the type.—Head and body, 270; tail, 108; hind-foot (s.u.), 44; ear, 22; skull, basal length, 52.5; greatest breadth, 27; nasals, 25 by 4.8; inter-temporal breadth, 10.2; palate, length, 32; breadth between outer corners of penultimate molars, 16; breadth between inner edges of the same teeth, 10.2; length of palatal foramina, 4.7; front of canine to back of last molar, 21.5; combined length of three anterior molariform teeth, 9.

Type. Male. B.M. No. 1.5.2.6. Original number, 3290; collected 6th November, 1900, by Mr. J. T. Tunney.

It will be seen, on comparing the above measurements with those given in the Catalogue (p. 249), that the present species is decidedly the smallest of all known bandicoots, and may be readily distinguished by size alone from all its allies.